

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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In the Matter of

Implementation of Section 309(j)  
of the Communications Act -  
Competitive Bidding

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PP Docket No. 93-253

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF SECRETARY

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**PETITION FOR PARTIAL RECONSIDERATION**

GTE Service Corporation on behalf of  
GTE's telephone and wireless service  
companies

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## **SUMMARY**

The Fifth Report and Order addresses a host of complex issues in implementing competitive bidding in certain radio services. GTE offers its suggestions for improving these policies and procedures in several limited respects. GTE's goal in seeking partial reconsideration is to ensure that auctions are conducted in a fully open and informed process that permits maximum bidder flexibility consistent with efficient operation.

To that end, GTE's Petition for Partial Reconsideration initially addresses the need for additional information about the applicants participating in a particular auction. First, the Commission should require full disclosure of the identity of the real parties in interest behind each and every applicant. This information will help to ensure the legitimacy of every participating bidder. Second, the Commission should identify the participants in a particular auction. This knowledge may impact the choices made by competing bidders and avoids the pitfalls associated with anonymous, secretive bidding. In GTE's view, it is critical that the identity of any bidder be fully and completely disclosed, and that this information be known and available throughout all phases of an auction.

The Petition for Partial Reconsideration next addresses the activity rules and upfront deposit policy adopted by the Commission. GTE concurs that substantial upfront payments are necessary to ensure the legitimacy of applicants, and that activity rules serve an important function in the conduct and closure of an auction. The choices made in the Fifth Report and Order, however, unnecessarily restrict the flexibility of multi-market bidders to participate in different bidding rounds, and may even discourage full and active participation by some interested parties. The Commission accordingly should adopt simplified bidding rules and should permit multi-market bidders to make use of an interest-bearing evergreen deposit account.

Finally, the Petition recommends the use of a standby queue mechanism — which provides access to more information about bids for licenses and license combinations — if the Commission retains its 10 MHz allocations for PCS. This mechanism will facilitate the ability of entities to combine the 10 MHz blocks into larger spectrum blocks or to design individualized geographic service areas. This flexibility will further the public interest by permitting interested parties to implement the service areas and blocks of frequencies they believe will best meet user needs.

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and the Communications Act -	)	
Competitive Bidding	)	

**PETITION FOR PARTIAL RECONSIDERATION**

GTE Service Corporation ("GTE"), on behalf of GTE's telephone and wireless operating companies, respectfully submits this petition for partial reconsideration of the Fifth Report and Order in the above-captioned proceeding.<sup>1</sup> GTE seeks reconsideration of five aspects of the Commission's decision. First, the Commission should take steps to ameliorate the further undue limitations placed on full cellular carrier participation in the personal communications service ("PCS") marketplace that are a practical result of the most recent allocation plan and the PCS-cellular cross-ownership rules. Second, given the experience in the auctions for nationwide narrowband PCS authorizations, the Commission should reconsider its methods for ensuring effective participation in 2 GHz PCS by designated entities. Third, the Commission should disclose the identity of bidders participating in the PCS auctions. Fourth, the Commission should revise its activity rules to make the functioning of the auctions more successful. Fifth, the PCS rules should be altered to deploy the "standby queue" mechanism tested during recent competitive bidding experiments for licenses within a region such as all the BTAs within an MTA. Adoption of these revisions will

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<sup>1</sup> Implementation of Section 309(j) of the Communications Act - Competitive Bidding, FCC 94-178 (July 15, 1994) [hereinafter "Fifth Report and Order"]. Public Notice of the Fifth Report and Order was given at 59 Fed. Reg. 37566 (July 22, 1994).

enhance the successful functioning of the auctions and help to ensure that they are conducted consistent with the goals established by the Commission.<sup>2</sup>

**I. THE REVISED ALLOCATION PLAN ADOPTED IN THE FIFTH REPORT AND ORDER HAS THE PRACTICAL EFFECT OF FURTHER UNDULY HINDERING EFFECTIVE CELLULAR CARRIER PARTICIPATION IN THE PCS MARKETPLACE**

The revised allocation plan adopted by the Commission for PCS combined with the reservation of spectrum for "entrepreneur blocks" has further restricted the ability of cellular carriers to compete on a comparable basis with other PCS operators.

Specifically, the Commission's June 13, 1994 order in the PCS docket<sup>3</sup> provides for three 30 MHz blocks (two allocated on an MTA basis and one allocated on a BTA basis) and three 10 MHz blocks (all three allocated on a BTA basis) for licensed PCS.<sup>4</sup>

In light of the practical effect of the Commission's rules regarding cellular carrier

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<sup>2</sup> GTE also filed a petition for partial reconsideration of the Second Report and Order in this docket. See Implementation of Section 309(j) of the Communications Act -Competitive Bidding, 9 F.C.C. Rcd 2348 (1994) [hereinafter "Second Report and Order"]; GTE Petition for Partial Reconsideration, PP Docket No. 93-253 (filed June 3, 1994) [hereinafter "GTE SR&O Petition"]. Petitions for reconsideration and clarification of the Second Report and Order were recently addressed in the Second Memorandum Opinion and Order in this docket, FCC 94-215 (Aug. 15, 1994) [hereinafter "Second Report and Order Reconsideration Order"].

<sup>3</sup> Amendment of the Commission's Rules To Establish New Personal Communications Services, FCC 94-144 (June 13, 1994) (Memorandum Opinion and Order) [hereinafter "Broadband PCS Reconsideration Order"].

<sup>4</sup> Id. ¶ 26. The Commission also allocated in that decision 20 MHz of spectrum for unlicensed PCS devices. Previously, in the Second Report and Order in the PCS docket, the Commission divided the licensed spectrum into two 30 MHz blocks (both allocated on an MTA basis), one 20 MHz block (allocated on a BTA basis), and four 10 MHz blocks (all allocated on a BTA basis). See Amendment of the Commission's Rules To Establish New Personal Communications Services, 8 FCC Rcd 7700, 7725, 7733 [hereinafter "PCS Second Report and Order"].

eligibility for PCS licenses,<sup>5</sup> GTE nonetheless believed, after release of the Broadband PCS Reconsideration Order, that in a number of BTAs it would have the opportunity to seek to bid on the three 10 MHz blocks. To the extent that it was successful in that effort, it would be able to operate systems within BTAs that would be fully competitive with the MTA-based PCS systems at least on a total spectrum basis.

In the Fifth Report and Order, however, the Commission designated frequency blocks C (30 MHz licensed on a BTA basis) and F (10 MHz licensed on a BTA basis) as “entrepreneur blocks.”<sup>6</sup> Eligibility to bid in these blocks “is limited to entities that, together with their affiliates and certain investors, have gross revenues of less than \$125 million in each of the last two years and total assets of less than \$500 million.”<sup>7</sup> The Commission concluded that this plan, while promoting opportunities to permit efficient aggregation of the blocks and encouraging participation by designated entities, “does not foreclose opportunities for other parties.”<sup>8</sup> In particular, “[b]idders ineligible for the entrepreneurs’ blocks will have the opportunity to bid on 99 30 MHz MTA licenses throughout the country, as well as 986 10 MHz BTA licenses nationwide.”<sup>9</sup>

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<sup>5</sup> Under the Commission’s PCS rules and policies, entities with a 20 percent or greater ownership of a cellular operator are limited to one 10 MHz BTA license in the same region as their attributable cellular interests. Broadband PCS Reconsideration Order ¶ 106, citing PCS Second Report and Order ¶¶ 107, 108, Section 24.404 of the Commission’s Rules. In addition, “[a]ttribution for cellular purposes also means overlap of the [cellular geographic service area (“CGSA”)] with at least 10 percent of the population of the PCS market (BTA or MTA). Broadband PCS Reconsideration Order at n.185. See also id. ¶ 136. PCS interests of 5 percent or more are to be attributed to the holder of the interest. Broadband PCS Reconsideration Order ¶ 107, citing PCS Second Report and Order at nn.62, 92.

<sup>6</sup> Fifth Report and Order ¶¶ 121, 127.

<sup>7</sup> Id. ¶ 121.

<sup>8</sup> Id. ¶ 127.

<sup>9</sup> Id.

The effect of the Commission's action, however, is to foreclose even further the opportunities for cellular carriers, many of which already face limited options to participate in the PCS marketplace. As a result of the Commission's limitations on cellular-PCS cross-ownership, specifically including the attribution standards, many cellular carriers will be ineligible to bid for all but a handful of the block A and B 30 MHz MTA allocations. As noted above, the remaining 30 MHz block, as well as one of the three 10 MHz blocks, is reserved for "entrepreneurs." GTE and many other existing cellular operators will, obviously, be foreclosed from seeking to acquire that spectrum. That leaves at most 20 MHz of spectrum available for licensing to cellular carriers in BTAs where they are not otherwise barred by the cellular-PCS cross-ownership restrictions.

This situation seriously disadvantages cellular operators, who already are subject to a number of constraints on their effective PCS participation, in seeking to compete on a full and comparable basis in the PCS marketplace. One of the more serious adverse consequences of such a plan is the potential cost disadvantage for a firm having only 20 MHz of spectrum in the service area<sup>10</sup> as compared to competitors with more and/or better spectrum. Under one set of usage pattern assumptions, a firm with 20 MHz will have network costs<sup>11</sup> that are around 15 to 25 percent higher than the

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<sup>10</sup> A cellular entity able to acquire 20 MHz of PCS spectrum in a BTA would not, under the PCS-cellular cross-ownership rules, also hold cellular spectrum in that same BTA.

<sup>11</sup> The main components of a PCS network include cell sites, switching facilities, and links between the two. In addition, there often will be aggregation points or other nodes between cell sites and switches. The cell sites, remote nodes, and the switching centers all contain radio and electronic equipment. The amount of equipment needed will depend on planned traffic demands, the size and terrain of the area covered, the amount of spectrum allocated, the access technology, and the expected traffic.



costs of entities with 30 MHz of spectrum.<sup>12</sup>

The possible effects of these serious cost discrepancies include: an inability by the higher cost firm to compete successfully against lower cost rivals; the market share and profits of the higher cost firm may be significantly lower; and, given the large fixed investment costs associated with PCS operations, lower cost firms may preemptively invest and thus seek to deter entry by higher cost competitors. These discrepancies clearly would impair effective PCS competition. In contrast, where all firms have equal amounts of spectrum, no one firm is advantaged, and there is a greater likelihood of more firms being viable in the long run in any given region.

Another factor to be considered by the Commission in these reconsideration proceedings stems from the plans to hold the BTA-based auctions after the MTA auctions are concluded.<sup>13</sup> In that event, there is a real prospect that the highest bidders for the BTAs will be the MTA winners, seeking to acquire a total of 40 MHz of

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<sup>12</sup> Generally, the number of cells in a network are determined by coverage or capacity. For low levels of traffic, coverage dictates the number and location of cells. For high levels of traffic, cells need to be decreased in size or sectored to increase capacity by permitting more frequent spectrum reuse. The amount of radio, electronics, and switching facilities needed is roughly proportional to either the number of cells and/or the amount of traffic.

Where capacity constraints are controlling, the number of cells needed will be roughly proportional to the amount of traffic. The costs for links between cell sites, switching centers, and other network nodes are roughly proportional to the product of average cell radius and the number of cells. The per-subscriber transport cost is generally a decreasing function of traffic density.

In coverage constrained systems, a slight reduction in the amount of spectrum available will not significantly affect costs, as there will be ample channels to serve all traffic. In denser markets, however, where capacity is effectively limited, the less spectrum available means the less capacity per cell and the more cells that are needed to provide any given level of capacity. This means that total, as well as average costs, are a decreasing function of the amount of spectrum available. Thus, a firm with less spectrum will have significantly higher costs per subscriber than its rival with more spectrum.

<sup>13</sup> Fifth Report and Order ¶ 37.

spectrum throughout all or a substantial portion of their respective licensed MTAs. Thus, other than the entrepreneur blocks, the Commission may be confronted with two dominant PCS competitors in substantial sections of the country. This development obviously would undermine the Commission's goals of diversity in PCS operations and a competitive PCS marketplace.

Aside from these skewed effects on effective competition in the PCS marketplace, this situation also may have negative effects for the PCS auctions. Specifically, the competitive disadvantage of a firm that can bid on only 20 MHz of spectrum in a particular BTA will significantly reduce the bidder's evaluation of the license. The effect of this circumstance in turn is to reduce likely auction proceeds.

GTE recognizes the importance of promoting participation by designated entities and other entrepreneurs in the PCS field. At the same time, however, the Commission has — apparently unintentionally — further hamstrung cellular operator participation in this important new service. In lieu of altering the band plan and the entrepreneur block allocations, the Commission can act in a number of alternative respects to ensure that cellular carriers are not placed at a heightened competitive disadvantage. These actions include:

1. Delete the cellular-PCS cross-ownership restrictions. Removal of the Commission's limitations on cellular carrier participation in the PCS marketplace would permit cellular carriers to obtain 30 MHz of spectrum in any MTA in the country, thus obviating any problems resulting from access to less spectrum than is held by PCS competitors.

2. Adopt the effective POPs test previously advocated by GTE in the PCS proceedings. GTE has previously suggested to the Commission that, in lieu of the current geographic overlap standard, it instead should multiply the percentage overlap of the population in the PCS and cellular service areas by the percentage ownership in

the cellular provider, thus arriving at an "effective POP" figure.<sup>14</sup> An effective population overlap of 20 percent would be a suitable eligibility threshold. This approach would represent a more rational determination of cellular eligibility for PCS authorizations.

3. Permit cellular carriers a full opportunity to divest cellular properties in the event of winning an auction for a 30 MHz license. In the Broadband PCS Reconsideration Order, the Commission concluded that "it is appropriate to allow cellular operators to divest themselves of attributable cellular interests that do not comply with the cellular/PCS cross ownership restriction after winning more than 10 MHz of PCS spectrum in the PCS auctions."<sup>15</sup> This divestiture option, however, is made available only to cellular operators that serve less than 20 percent of the PCS service area.<sup>16</sup>

In light of the entrepreneur block reservation adopted in the Fifth Report and Order and its effect on opportunities for full cellular carrier participation in the PCS market at least in some BTAs, these recently adopted rules permitting limited cases of post-auction divestiture of cellular interests are overly restrictive. The competitive disadvantages associated with carrier access to at most only 20 MHz of spectrum — compared with competitor access to 30 MHz (and perhaps more) — require at least a broader-based divestiture policy.

The Commission's concerns that an entity with cellular interests involving an overlap of more than 20 percent would seek to delay the initiation of PCS operations and otherwise manipulate the process in order to maximize the sales price for its cellular interests are unfounded. Such claims ignore the fact that, if the firm obtaining

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<sup>14</sup> See, e.g., Petition for Limited Reconsideration or Clarification of GTE Service Corporation, GEN Docket No. 90-314, at 2-5 (filed Dec. 8, 1993).

<sup>15</sup> Broadband PCS Reconsideration Order ¶ 144.

<sup>16</sup> Id.

the PCS license is going to operate and meet its buildout requirements, it is unlikely to reduce the profitability of its PCS license. Moreover, extension of the recently adopted procedures for effecting divestiture,<sup>17</sup> including revocation of license if the transfer of interests does not occur within the prescribed time frame, would reinforce the seriousness of a decision made by a cellular carrier to participate in the PCS auctions.

Thus, cellular carriers should be allowed full flexibility to bid for PCS licenses for which they may not otherwise be eligible, so long as they agree, consistent with current Commission rules, to divest the appropriate cellular properties within 90 days of the PCS license grant.<sup>18</sup> The Commission similarly should permit divestiture of the interest(s) to an interim independent trustee, so long as the applicant has no interest in or control of the trustee.<sup>19</sup> In the event the divestiture does not occur within the 90 day window, the Commission should immediately revoke the license and retain, on behalf of the U.S. Treasury, all auction monies associated with the particular license.<sup>20</sup>

Implementation of one of these three steps will help to ensure that cellular carriers are placed on a more comparable footing to the extent they wish to participate in the PCS marketplace. In the absence of some remedial action by the Commission, cellular carriers will face even more serious disadvantages in providing competitive PCS offerings, and the Commission's laudable goals in seeking to ensure a fully competitive PCS environment will be further undermined.

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<sup>17</sup> See id. ¶ 145-46; new § 24.404(f).

<sup>18</sup> See Broadband PCS Reconsideration Order ¶ 144.

<sup>19</sup> Id. ¶ 146.

<sup>20</sup> Id.

**II. THE COMMISSION, IN LIGHT OF THE EXPERIENCE WITH THE NATIONWIDE NARROWBAND PCS AUCTIONS, SHOULD REVISE ITS RULES TO INCREASE OPPORTUNITIES FOR EFFECTIVE PARTICIPATION BY DESIGNATED ENTITIES IN 2 GHz PCS**

The Commission, in part pursuant to Congressional directive,<sup>21</sup> has set itself some commendable goals in seeking to promote participation by women, minorities, small businesses, rural telephone companies, and entrepreneurs in the nascent PCS industry. The decisions in this docket as well as the PCS docket have reflected the Commission's ongoing efforts to find the best way to implement those goals. GTE strongly endorses the Commission's efforts "to encourage the entry of designated entities" and "to promote strong, long-term bona fide competitors."<sup>22</sup> Achievement of these results will help to ensure a diverse, competitive PCS marketplace.

Recent experience in the nationwide narrowband PCS auctions, however, suggests that the Commission should revisit the structure adopted in the Fifth Report and Order in order to explore a more effective mechanism. GTE is concerned that the adoption of the "entrepreneur block" licensing approach may in fact defeat the Commission's PCS goals as well as full achievement of the public interest. For example, while the Commission has taken steps to assist designated entities in participating in the auctions themselves, post-licensing obligations — including the costs of relocation of existing microwave users and full compliance with the buildout requirements — pose significant roadblocks to effective and continued participation by designated entities in the PCS industry. These circumstances may lead to a wholesale departure of designated entities from the PCS arena upon reaching the conclusion of any minimum holding period.

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<sup>21</sup> See 47 U.S.C. § 309(j)(4)(D) (Commission must "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services").

<sup>22</sup> Fifth Report and Order ¶ 112.

GTE adamantly supports full participation by designated entities in the PCS auctions as well as their long term involvement in the industry. GTE thus urges the Commission to re-examine a plan apparently being considered prior to the adoption of the Fifth Report and Order. Specifically, GTE understands that the Commission was, prior to June 29, 1994, evaluating a proposal whereby designated entities and entrepreneurs would be awarded bidding credits in bidding on licenses in any of the PCS spectrum blocks, with no specific block set aside for these entities. As discussed below, such a plan would help to ensure that designated entities desiring to participate in PCS would have access to resources necessary to permit their effective, competitive participation in the auctions as well as the service marketplace.

Under the plan envisioned by GTE, designated entities would be permitted to "pair up" with significant investors. Depending upon the level of equity investment and control to be exercised by such investors, the designated entities would be eligible for a sliding scale of bidding credits.<sup>23</sup> As an initial matter, this would help to ensure that the designated entities had access to the necessary resources (financial and otherwise) to prepare for and participate in the broadband PCS auctions. Upon winning an auction, these same resources could be applied to the construction and operation of the authorized PCS system, and would help to ensure that a winning designated entity did not suffer from "winner's remorse."<sup>24</sup>

GTE believes that this approach will help to address the serious concerns raised by a number of designated entity representatives and others following the conclusion of the nationwide narrowband PCS auctions.<sup>25</sup> Given the level of bid amounts — and

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<sup>23</sup> Such entities also might be eligible for other relief such as installment payment plans and tax certificates.

<sup>24</sup> See, e.g., Doug Abrahms, "FCC Not Upset by Late Payments for Interactive TV," *Washington Times*, Aug. 17, 1994, at B10 (failure of successful bidders in IVDS auctions to make required down payments).

<sup>25</sup> See, e.g., PCIA Bulletin, Vol. 94, No. 30, at 5 (Jul. 29, 1994).

given the fact that broadband PCS licenses are expected to be auctioned at even higher prices — these persons expressed serious doubts about the financial capability of many designated entities to participate in the granting of PCS licenses, as well as their ability subsequently to implement the authorized operations. Accordingly, the Commission should take advantage of this opportunity to adopt steps to ensure not only that designated entities may fully participate in the broadband PCS auctions but also provide fully competitive service offerings.

**III. THE COMPETITIVE BIDDING PROCESS WILL BE BEST SERVED BY FULL PUBLIC DISCLOSURE OF THE IDENTITY OF BIDDERS DURING THE BIDDING PROCESS**

The Fifth Report and Order explains that, upon timely receipt of the upfront payments, the Commission will issue a Public Notice “announcing the names of all applicants that have been determined to be qualified to bid.”<sup>26</sup> Apparently, each applicant listed on this public notice will be issued a bidder identification number under separate cover, which the bidder will then be required to tender when submitting bids.<sup>27</sup> The Fifth Report and Order retains for PCS auctions the procedures originally set out in the Second Report and Order by which the Commission will, during multiple round auctions, “announc[e] bidder identification numbers and bid amounts but not the identities of the bidders.”<sup>28</sup>

The Second Report and Order Reconsideration Order reverses this decision.<sup>29</sup> The experience with the initial narrowband PCS auctions revealed the difficulty in

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<sup>26</sup> Fifth Report and Order ¶ 70. See also Second Report and Order, 9 F.C.C. Rcd 2348, 2377.

<sup>27</sup> See Fifth Report and Order ¶ 71; Second Report and Order, 9 F.C.C. Rcd 2348, 2377.

<sup>28</sup> Second Report and Order, 9 F.C.C. Rcd 2348, 2375.

<sup>29</sup> Second Report and Order Reconsideration Order ¶ 42.

uniformly maintaining anonymous bidder identities as well as disparities in access to information with only some bidders knowing the identity of other bidders.<sup>30</sup> As a result, the Commission has decided generally to release the identities of bidders before each auction, although it has retained the right to withhold such data on an auction-by-auction basis.<sup>31</sup>

GTE believes that the Commission should apply its recently adopted presumption in favor of bidder identity disclosure to the broadband PCS auctions. In order to be successful in an ascending bid auction, a bidder must construct a strategy based on its own valuation of the spectrum as well as estimates of its competitors' valuations, and the past bids of all other bidders. In this fashion, bidders may anticipate and respond to their competitors' actions. A fundamental component of this exercise, however, is knowledge of who the competitors are. Such information allows bidders to make more reasoned decisions during the bidding process, altering strategies as necessary.

Studies show that increases in available information raise the level of competition within any given auction.<sup>32</sup> The Commission itself has acknowledged that maximizing the information available to bidders increases the "efficiency of license assignments by providing bidders with useful information about the likely availability of complementary services and standards both inside and outside the areas they wish to serve."<sup>33</sup> In addition, access to bidder identification information may raise the value estimates of auction opponents, thereby increasing revenue from the competitive

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<sup>30</sup> Id. ¶ 40.

<sup>31</sup> Id. ¶ 42.

<sup>32</sup> Schroepfer, Allocating Spectrum Through the Use of Auctions, 14 Hastings Comm. & Ent. L.J. 35 (1991).

<sup>33</sup> Second Report and Order, 9 F.C.C. Rcd 2348, 2375. See also Second Report and Order Reconsideration Order ¶ 39.



bidding process while ensuring award to the bidder who most highly values the license. In contrast, the reduced level of information associated with secretive bidding may produce a failure to capture the full market value of a license.<sup>34</sup>

A bidder's identity can provide a lot of information about the value of a particular license. For example, to the extent a bidder already operates in the subject service area, its bid reflects assessments about the level of potential demand and the costs of operating in the area. Data derived from such bidder identity information is likely to be particularly useful to new firms entering an area or small entities lacking access to resources necessary to permit a comprehensive market evaluation.<sup>35</sup>

For these reasons, GTE recommends that the Commission issue a public notice or other notification identifying the entity associated with each bidder identification number in advance of each PCS auction. As demonstrated above, such a procedure maximizes information flow and efficient bidding without sacrificing important consumer safeguards.

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<sup>34</sup> The Commission has voiced its belief that disclosure of bidder identities would raise concerns about collusion and strategic manipulation. *E.g.*, Second Report and Order Reconsideration Order ¶ 41. GTE believes that the Second Report and Order and the Fifth Report and Order contain other, more effective mechanisms for deterring or otherwise addressing any such unacceptable conduct.

<sup>35</sup> As the Commission apparently observed, in the recent narrowband PCS auctions, a number of sophisticated operators, with knowledge of the individuals bidding on behalf of particular firms, were able to determine the identity of most bidders and their bid amounts. Less sophisticated entities, including new entrants as well as many of the designated entities being encouraged by the Commission, would not have this same capability. Public disclosure of bidder identity information thus would promote fairness to all participants.

**IV. THE COMMISSION'S ACTIVITY RULES SHOULD BE REVISED TO FACILITATE MORE EFFECTIVE OPERATION OF THE COMPETITIVE BIDDING PROCESS**

For PCS auctions, the Fifth Report and Order has adopted the modified Milgrom-Wilson activity rule also reflected in the Second Report and Order.<sup>36</sup> In seeking reconsideration of the Second Report and Order, GTE argued that this rule, particularly when combined with the upfront payment requirements, unnecessarily restricts bidder flexibility. The Commission has rejected GTE's arguments in the Second Report and Order Reconsideration Order,<sup>37</sup> but explicitly noted that it would adopt specific rules in the context of each service. As detailed below, deployment of the modified Milgrom-Wilson activity rule in broadband PCS auctions unduly and unnecessarily restricts bidding strategies. The Commission instead should require only that bidders be active on a single license in each round, as contemplated under the original Milgrom-Wilson activity rule.

Under the modified Milgrom-Wilson activity rule,<sup>38</sup> PCS auctions would be conducted consistent with the following elements:

- Bidders would be limited to bidding on licenses encompassing no more than the number of MHz-pops covered by their upfront payment. This payment must be equal to \$0.02 per pop per MHz for the maximum number of combined MHz-pops.
- Bidders would have flexibility to shift their bids among any licenses for which they have applied as long as the total MHz-pops encompassed

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<sup>36</sup> Fifth Report and Order ¶¶ 51-57.

<sup>37</sup> Second Report and Order Reconsideration Order ¶¶ 14-17.

<sup>38</sup> The original Milgrom-Wilson proposal "simply required each bidder to be active on at least one license in each round of bidding." Second Report and Order, 9 F.C.C. Rcd 2348, 2371. Being "active" in turn was defined as either having the high bid for the particular license from the previous round or submitting a bid that exceeds the previous round's high bid for that license by at least the minimum bidding increment. *Id.*

by those licenses does not exceed the number for which they made an upfront payment, to preserve maximum eligibility.

- Bidders would have to maintain some minimum activity level during each round of the auction.
- During the first stage of the auction, a bidder would be required to be active on licenses encompassing one-third of the MHz-pops for which it is eligible; falling below the prescribed activity level would lead to a reduction in eligibility.
- During the second stage of the auction, bidders would be required to be active on two-thirds of the MHz-pops for which they are eligible.
- During the third stage of the auction, bidders would be required to be active on licenses encompassing all of the MHz-pops for which they are eligible.
- The auction would move from stage one to stage two when, over three rounds of bidding, the high bid has changed on ten percent or less of the spectrum being auctioned. Stage three would begin when the high bid has changed on five percent or less of the spectrum over three rounds in stage two.
- In order to speed up an auction, at any time after the initial fifteen rounds, the Commission may announce that the next stage of the auction will begin in the next bidding round.
- To minimize the consequences of clerical errors and to compensate for unusual circumstances that somehow delay preparation of a bid or its submission on a particular day, the Commission generally will allow one automatic waiver (for failure to meet the minimum bid activity requirement) during each stage of an auction.
- The Commission intends to employ a simultaneous stopping rule for PCS licenses. The agency has retained discretion to declare at any point after forty rounds in a simultaneous multiple round auction that the auction will end after some specified number of additional rounds (generally, three rounds).

The plan reflected in the Fifth Report and Order would in fact foreclose many important PCS bidding strategies, in a manner inconsistent with the Commission's

stated intent.<sup>39</sup> Specifically, the modified Milgrom-Wilson activity rule unnecessarily complicates the PCS auctions and limits the ability of bidders to revise their plans throughout the course of the auction. Particularly troubling are the rules regarding movement from one stage to the next, with the associated increasing required minimum activity levels.

These movement rules create an "exposure" problem, particularly where an entity is seeking to bid on a combination of possible PCS authorizations. For example, assume the bidder is competing for licenses in the St. Louis, Little Rock, and Dallas MTAs. In this bidder's view, the value of each license is enhanced if the bidder wins the other two licenses as well. Conversely, obtaining only one license out of the three MTAs would be worth much less to the bidder.

The modified Milgrom-Wilson rule adopted in the Fifth Report and Order may force the bidder in the above example to submit a relatively high bid on properties with little stand alone value at an early stage of the auction in order to ensure that the bidder can continue to participate in subsequent stages of the bidding with respect to all markets in which it is interested. Under a simpler activity rule, a rational bidder might not begin bidding on such a property until it was fairly certain of winning the other two associated licenses. The adopted rules make it much less likely that a potential bidder could implement this rational strategy. Indeed, staying active on all three licenses may lead to a situation in which the bidder pays a high price for a property that has little stand alone value to that bidder. In contrast, the original Milgrom-Wilson activity rule endorsed by GTE is a superior approach because it does not require a bidder to stay active on all properties, thus resulting in less of an exposure problem.

The modified activity rules also restrict a bidder's ability to alter bidding plans if information revealed during the latter stages of the auction causes the bidder to

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<sup>39</sup> See Second Report and Order, 9 F.C.C. Rcd 2348, 2371.

become interested in additional properties (consistent with the level of its upfront payment). In both cases, the modified Milgrom-Wilson activity rule adopted in the Fifth Report and Order operates to encourage artificial bidding activity that is inconsistent with the bidder's true intent. The rule also can lead to results that contradict one of the primary objectives of the Commission in adopting these activity rules — namely, to give bidders the greatest degree of flexibility to revise their bidding plans during the course of the auction itself.

GTE recognizes the purposes underlying the Commission's adoption of the modified Milgrom-Wilson activity rule, including the agency's desire to ensure that the auctions move at an appropriate speed and are not unduly delayed either intentionally or unintentionally. These concerns, however, can be more effectively addressed with other mechanisms. Such tools include varying the size of the minimum bid increment and varying the number of rounds per day. Having the auction move more rapidly early during the process can easily reduce delay. The Commission's adoption of large bid increments during early rounds and when the most participants are active in the auction, with a reduction in the increments as bidding falls, will allow bidders to bid more nearly up to their valuation of the license, while at the same time allowing the early rounds of the auction to proceed quickly.

The Commission has decided to "provide bidders with a single business day to submit bids, and conduct one round of bidding each business day."<sup>40</sup> At the same time, the Commission reserved the discretion to vary the duration of the bidding rounds or the interval at which bids are accepted in order to move the auction toward closure more quickly.<sup>41</sup> As recognized in the Fifth Report and Order, such action would most successfully and effectively be taken in the early rounds of the auction. Multiple rounds

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<sup>40</sup> Fifth Report and Order ¶ 50.

<sup>41</sup> Id.

can be completed in the first days of the auction, with the result that bids increase rapidly toward their final prices.

The mechanisms of varying bid amounts and the duration of bidding rounds are far more effective than reliance on the modified Milgrom-Wilson activity rule. At the same time, as described above, this rule imposes significant limitations likely to be detrimental to the most successful operation of the PCS auctions. This balance suggests the Commission should replace the activity rule adopted in the Fifth Report and Order with a simpler standard. The Commission can do so by building on the successes of the recent narrowband PCS auctions. Since the bidding in those auctions never moved out of Stage I, the applicable activity rules were relatively simple.

The Commission should adopt the original Milgrom-Wilson activity rule, which requires only that a bidder remain active on one property in a round in order to remain eligible to bid later on any property or combination of properties for which the bidder has made sufficient upfront deposits. Dispensing with the modified Milgrom and Wilson activity rule — and permitting an entity to continue bidding in the next round so long as it has participated at some level in the current round — affords maximum flexibility for qualified entities to adapt their bidding strategies to the activities of other applicants. Having this flexibility will encourage greater numbers of interested, qualified entities to participate in the proceedings.

Maximum participation by qualified entities provides two important benefits. First, the auctions will more likely result in the award of licenses to the entity placing the highest value on the radio spectrum associated with a particular license. This also will maximize revenues to the U.S. Treasury. Second, a competitive bidding process structured in this fashion is more likely to lead to the most efficient spectrum use.

Finally, GTE finds the Commission's authority to announce, after forty rounds, that the auction will close subsequent to three additional rounds to be very troubling and otherwise inconsistent with the Commission's bidding method for broadband PCS

auctions. Such action would effectively reduce the auction to the equivalent of a first price sealed bid auction. Theory suggests and experiments confirm that this approach would limit auction proceeds and make efficient aggregation of licenses more difficult. GTE accordingly urges the Commission not to exercise its discretion to close the auction in this manner. Instead, the Commission should conclude the auction for all markets involved once a single round passes in which no new acceptable bids are submitted for any license.<sup>42</sup>

**V. THE COMMISSION SHOULD ADOPT STANDBY  
QUEUES FOR BIDDING ON BTAs**

GTE urges the Commission to adopt a "standby queue" bidding mechanism for the BTA spectrum allocations.<sup>43</sup> The standby queue mechanism was considered in the experiments sponsored by the National Telecommunications and Information Administration ("NTIA") and conducted at the California Institute of Technology ("Caltech").<sup>44</sup> As described by NTIA:

The "stand-by queue" feature of [Adaptive User Selective Mechanism software] allows parties seeking individual licenses to coordinate their bids in order to beat the currently prevailing bid for a combination of licenses. The stand-by queue displays the amount that other bidders are willing to pay for the licenses that are part of a combination bid. A bidder can determine from the sum of these amounts how much to raise his or her own bid in order to surpass the current winning bid.<sup>45</sup>

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<sup>42</sup> See Fifth Report and Order ¶ 47; Second Report and Order Reconsideration Order ¶ 12.

<sup>43</sup> The Second Report and Order Reconsideration Order left open the possibility of Commission deployment of a standby queue mechanism in appropriate circumstances. Second Report and Order Reconsideration Order ¶ 44.

<sup>44</sup> See Letter to Honorable Reed Hundt from Larry Irving, Assistant Secretary for Communications and Information, PP Docket No. 93-253 (filed Feb. 28, 1994) (hereinafter NTIA Caltech Letter).

<sup>45</sup> Id. at n.6.

To fully understand the functioning of this mechanism, GTE provides the following example. Assume the Commission is conducting a simultaneous auction for a number of licenses. Each participating bidder is eligible to submit a set of bids on one or a combination of properties in each round of the bidding. All active bidders submit one bid or one set of bids per round. All properties close at the same time, when bidding stops. The activity rules and minimum bid increments will determine who is eligible to bid in each round and the minimum amounts they must bid. Additionally, bidders can place bids in the queue in each round.

The standby queue consists of a set of listings of groups of properties and a bid for those sets of properties. Other bidders then can combine their bids with offers in the queue. For example, suppose that, in round 15, firm A bid \$100 million for licenses in three contiguous MTAs (e.g., St. Louis, Little Rock, and Dallas). Also suppose that there was an offer in the queue for Dallas and Little Rock from firm B for \$65 million. Then, in round 16, firm C, interested only in St. Louis and willing to pay at least \$35 million for the license, could combine a bid of, say, \$36 million with the \$65 million in the queue from firm B, to outbid firm A for the combination of the three properties.

Suppose further that firm D had bid \$40 million for the Chicago MTA. Suppose that firm C was interested in St. Louis only if it could also get Chicago. Given an offer of \$65 million in the queue from firm B, firm C could outbid the firm D/firm A combination by submitting a \$76 million bid in combination with the offer from firm B in the queue. Firms A and D could then each put offers in the queue in the next round that either one could utilize in the following round to outbid the firm b/firm c combination. Moreover, other bidders could place offers in the queue for groups of properties that might overlap with the Chicago-St. Louis-Little Rock-Dallas combination.

In certain situations, combinations of licenses in contiguous areas or across spectrum blocks are worth a great deal more than the sum of their individual values. Critically, the Commission should ensure that bidders may put together 10 MHz



properties in patterns that allow such bidders to compete most effectively against the 30 MHz licensees.

Adopting a standby queue mechanism for the 10 MHz BTA blocks would facilitate a bidder putting together a block of 20 MHz in a particular geographic area. The process would allow a bidder seeking to combine the smaller blocks into a larger set of frequencies to obtain full information about the status of bidding on the individual blocks in a convenient manner that permits the bidder to act in a rational and efficient manner.

In addition, bidders could combine blocks on a geographic basis, seeking to establish a service area other than those defined by the Commission. For example, a bidder may not want to provide service across a full MTA, but may want to combine a subset of the BTAs associated with that MTA. Similarly, a bidder may view a combination of BTAs as worth more than any single BTA or smaller combination thereof.

Adoption of the standby queue proposal thus would enhance the flexibility of potential service providers to design appropriate areas of service consistent with their business plans and financial capabilities. Facilitating achievement of this goal is consistent with the policies enunciated by the Commission in this proceeding as well as in the PCS docket.

While recognizing the value of these combinations, it also is necessary to limit the combinations on which bids can be placed in order to control the complexity of the auctions. Accordingly, GTE recommends that the Commission should sponsor standby queues only for BTAs within an MTA.<sup>46</sup> Thus, a bidder would not be permitted to bid on a 10 MHz block in Boston and a 10 MHz block in San Diego; that entity could,

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<sup>46</sup> The Commission may want to consider, however, employing the standby queue mechanism for MTAs within certain defined regions.